

SII SMITH INTERNATIONAL, INC

0277 / 31654

TO: Ronald Eyre**FROM:** Monica Landry**DATE:** June 17, 1997**SUBJECT:** CONCEPT NO. 97-ME60

Cutting Element With Canted Design For Improved Braze
Contact Area

Thank you for submitting the subject concept. It has been assigned the number listed above and a copy is attached for your file.

Your concept will be sent to the Concept Committee Members for review prior to the monthly Committee Meeting and also to "expert" reviewers who have knowledge in the particular field.

You will promptly be notified of any decisions reached by the Concept Committee:

**** NOTICE ****

If you know, or at any time in the future, have any knowledge of reduction to practice, lab and/or field test results and especially DATES OF SALES with the features of your concept, submit this information immediately to Patent Services. It is important that the appropriate, subject concept number be referenced on all such information so that it can be properly filed in your concept file.

You will receive a written letter of invitation to a future Concept Committee Meeting at which time you, or your designated representative, can explain the technical merits of the subject concept. A specific time will be assigned, allowing for a 5-minute presentation and a 5-minute questions and answer period.

If you have any questions regarding this concept, feel free to call Patent Services at (713) 233-5337.

:ml
attachment

DISCLOSURE OF INVENTIONSMITH INTERACTIVE INC.
PATENT SERVICES DEPARTMENTCONCEPT NO 97-A7E-66

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Date Docketed _____

<u>Inventor's Name</u>	<u>Emp. #</u>	<u>Dept. #</u>	<u>Ext.</u>	<u>Supervisor</u>
Ronald K. Eyre	185	850	224	Nathan Anderson

1. TITLE:

Cutting Element with Canted Design for Improved Braze Contact Area

2. DESCRIPTION OF INVENTION: (Attach additional sheets or drawings if necessary)

A cutting element typically used for matrix body drill bits in which the diamond table is canted so that there is increased braze area without sacrificing the positive effects of a thick (>.040") diamond table.

3. LIST RELATED PRIOR ART PATENT NUMBERS (This portion MUST be completed prior to submittal):

5,605,199

5,590,728

5,494,477

4. PROBLEMS EXISTING WITH PRIOR ART:

As abrasive material thickness is increased, the cutter retention in the bit becomes more of a problem. This is due to the fact that braze area is decreased as well as problems with diamond table overhang on the cutter pocket.

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5. DESCRIBE HOW PROBLEMS ARE SOLVED BY PRESENT INVENTION AND OTHER ADVANTAGES:

The problem of having a reduced braze area and cutting table overhang is eliminated while still taking advantage of the thicker diamond table.

6. DATES:

A. Conception: 5/13/97

Identify first sketch or drawing: 5/13/97

B. First Disclosure: 5/13/97

To whom? Kesh Keshavan
Jim Hoen

How: Verbal and sketch

C. Reduction to practice, started:

Completed:

D. Lab or Field Test:

Results:

INVENTORS

NAME

DATE

EXPLAINED AND UNDERSTOOD BY

NAME

DATE

May 29 2003 5:11PM Sii MegaDiamond

(801) 818-4549

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